the continued existence of these species, nor result in the adverse modification of their critical habitat. Species for which the Services previously concluded were likely to be jeopardized or their critical habitats adversely modified are presented in Table 4.

On April 27, 1998, the Services met with EPA staff to discuss the draft and EPA's concerns regarding the precedence of a jeopardy biological opinion on threatened and endangered species on their water quality criteria rule making process and their capacity to respond to the reasonable and prudent alternatives presented in the draft opinion.

On October 29, 1998, EPA Region IX staff, in cooperation with the Office of Science and Technology in Washington D.C., submitted a proposal to the Services to modify the CTR as proposed. Included in this proposal were draft agreements to change the scope of the CTR for criteria for mercury, selenium, and pentachlorophenol. As proposed these commitments made significant progress towards ameliorating the effects of the CTR. However, only the Administrator of EPA has the authority to make modifications to proposed rule making. Therefore, proposed modifications have yet to be completed.

Between October 1998 and March 17, 1999, EPA and Services' staff worked together to resolve issues and develop agreeable timelines and procedures to amend the proposed action as proposed in the August 5, 1997, version of the proposed CTR. On April 7, 1999, EPA sent the Services a letter documenting the proposed modifications. Services' staff utilized these draft agreements to formulate revised reasonable and prudent alternatives that were presented to EPA in a revised draft jeopardy biological opinion, informally transmitted to EPA on April 9, 1999.

Between April and August 2, 1999, and after review of the revised reasonable and prudent alternatives, EPA and the Services met on August 2, 1999, to discuss what further modifications to the proposed action were necessary to remove the jeopardizing effects of the CTR. On September 14, 1999, EPA transmitted a draft facsimile copy of their proposed modifications to the CTR for Services review.

Between August and December 16, 1999, EPA and Services' staff continued to refine the proposed modifications to the CTR. After numerous discussions between EPA and Services' staff regarding these modifications, EPA re-submitted their final proposed modifications on December 16, 1999. The Services have based this final opinion on those modifications. The final modifications to the proposed action are incorporated herein by reference in the following "Description of the Proposed Action", and "Conclusions" sections of this biological opinion.

DESCRIPTION OF THE PROPOSED ACTION

EPA is issuing a final rule on the CTR. This rule will promulgate legally enforceable water quality criteria for the state of California for inland surface waters, enclosed bays and estuaries, for all programs and purposes under the CWA. When completed these criteria are available to the State for immediate adoption and subsequent use by the State and Regional Water Quality

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Control Boards (RWQCBs) for their use in permit writing and identification of impaired waters. The Final CTR will also Total Maximum Daily Loads (TMDL), Interim Permit Limits, Mixing Zones, and Variances

On August 5, 1997, EPA published a proposed rule on the CTR based on the Administrator's determination that criteria were needed in the State of California to meet the requirements of section 303(c)(2)(B) of the Clean Water Act of 1987, as amended (33 USC 1251 et seq.; CWA). This section of the CWA requires States to adopt numeric water quality criteria for priority toxic pollutants for which EPA has issued CWA section 304(a) criteria guidance and whose presence or discharge could be reasonably expected to interfere with designated beneficial uses. Priority toxic pollutants are identified in 40 CFR Part 131.36; currently, 126 constituents are classified as priority toxic pollutants.

The CTR is important for several environmental, programmatic and legal reasons. Control of toxic pollutants in surface waters is necessary to achieve the CWA's goals and objectives. Many of California's monitored river miles, lake acres, and estuarine waters have elevated levels of toxic pollutants. Recent studies on California water bodies indicate that elevated levels of toxic pollutants exist in fish tissue; this has resulted in the issuance of fishing advisories or bans. These toxic pollutants can be attributed to, among other sources, industrial and municipal discharges. Toxic pollutants for which fish advisories exist include mercury and selenium, two priority pollutants addressed in the CTR.

Water quality standards for toxic pollutants are important to State and EPA efforts to address water quality problems. Clearly established water quality goals enhance the effectiveness of many of the State's and EPA's water programs including permitting, coastal water quality improvement, fish tissue quality protection, non-point source controls, drinking water quality protection, and ecological protection. Numeric criteria for toxic pollutants allow the State and EPA to evaluate the adequacy of existing and potential control measures to protect aquatic ecosystems and human health. Numeric criteria also provide a more precise basis for deriving water quality-based effluent limitations in National Pollutant Discharge Elimination System (NPDES) permits to control toxic pollutant discharges.

EPA, through the CTR, establishes water quality criteria for toxic pollutants for inland surface waters, enclosed bays, and estuaries in the State of California. These numeric water quality criteria for priority toxic pollutants are necessary to fulfill the requirements of section 303(c)(2)(B) of the CWA. The CTR also authorizes a compliance schedule provision in the preamble allowing the RWCQB's to give existing dischargers up to five years after their first permit renewal following the final CTR to come into compliance. The maximum time that the CTR allows for a compliance schedule is ten years after the adoption of the final rule, regardless of how many years after the final rule the first permit renewal occurred.

EPA's publication of the final CTR will fill a gap in California water quality standards. This gap is the result of litigation by several dischargers who sued the California State Water Resources

Control Board (SWRCB) over whether the SWRCB adopted its statewide water quality control plans for inland surface waters, enclosed bays and estuaries in compliance with State law. The SWRCB's water quality control plans contained water quality criteria for many priority toxic pollutants. The California Superior Court for the County of Sacramento issued its final decision in favor of the plaintiffs in March 1994. In July 1994, the Court ordered the SWRCB to rescind the two water quality control plans, and the SWRCB formally did so in September of 1994. The State of California is currently without numeric water quality criteria for these priority toxic pollutants as required by the CWA, necessitating this action by EPA. The State of California is also in the process of readopting its statewide water quality control plans. When California completes its readoption process, and EPA approves the State plans, the Federal standards will no longer be needed.

In the interim, when these proposed Federal criteria take effect they will create legally applicable water quality criteria in Califomia for inland surface waters, enclosed bays and estuaries, for all programs and purposes under the CWA. This proposed rule does not change or supersede any criteria that were previously promulgated for the State of California including those promulgated in the National Toxics Rule (NTR), as amended (Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants, 57 FR 60848, December 22, 1992; and the NTR as amended by the Administrative Stay of Federal Water Quality Criteria for Metals and Interim Final Rule, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States Compliance Revision of Metals Criteria, 60 FR 22228, May 4, 1995 (referred to as the "NTR, as amended"). These criteria are footnoted in the table in the final CTR, so that readers may see the criteria previously promulgated in the NTR, as amended, together with the new proposed criteria. The CTR when finalized will not change or supersede federally approved, state-adopted, site-specific objectives.

Water Quality Criteria Overview

Section 303 of the CWA mandates that States adopt water quality standards to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Water quality standards consist of beneficial uses designated for specific water bodies and water quality criteria necessary to protect uses. Water quality criteria may be numeric, for example 9 μ g/L of copper, or narrative, such as "no toxics in toxic amounts."

In order to avoid confusion, it must be recognized that the CWA uses the term "criteria" in two separate ways. In section 303 of the CWA, the term "criteria" is part of the definition of a water quality standard. "Criteria" refers to the ambient component of the water quality standard contained in state or Federal law. However, section 304(a) of the CWA directs EPA to publish water quality "criteria" guidance which encompass scientific assessments of the health and ecological effects of various pollutants listed pursuant to section 307(a) of the CWA and which are used to support development of ambient criteria as part of the water quality standards. CWA section 304(a) criteria guidance are developed using <u>Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses</u> (National

Guidelines) and are based on the results of toxicity tests conducted with organisms that are sensitive to specific toxicants. These section 304(a) criteria are intended as guidance only and have no binding effect. In contrast, the ambient criteria adopted by EPA pursuant to section 303 of the CWA are legally enforceable.

These legally enforceable criteria adopted pursuant to section 303 are based on: (1) the 304(a) criteria guidance; (2) 304(a) criteria guidance modified to reflect site-specific conditions; or (3) other scientifically defensible methods. EPA guidance as described in the Water Quality Standards Handbook, allows states to establish water quality criteria/objectives on a site-specific basis to reflect local conditions. EPA requires that a scientifically justifiable method be employed in deriving site-specific criteria. The method must be consistent with the assumptions, rationale, and spirit of the National Guidelines.

Modifications to the Final CTR

Based on the Services' April 9,1999, revised draft biological opinion EPA submitted the following proposed modifications to the CTR in their December 16, 1999, letter to the Services. These modifications will be incorporated by reference into section M of the preamble of EPA's final promulgation of the CTR. They are recorded here to reflect EPA's agreed-upon modifications to the proposed CTR.

- I. <u>EPA Modifications Addressing the Services' April 9, 1999 draft Reasonable and Prudent Alternatives for Selenium:</u>
- A. EPA will reserve (not promulgate) the proposed acute aquatic life criterion for selenium in the final CTR.
- EPA will revise its recommended 304(a) acute and chronic aquatic life criteria for В. selenium by January 2002. EPA will propose revised acute and chronic aquatic life criteria for selenium in California by January of 2003. EPA will work in close cooperation with the Services to evaluate the degree of protection afforded to listed species by the revisions to these criteria. EPA will solicit public comment on the proposed criteria as part of its rulemaking process, and will take into account all available information, including the information contained in the Services' Opinion, to ensure that the revised criteria will adequately protect federally listed species. If the revised criteria are less stringent than those proposed by the Services in the Opinion, EPA will provide the Services with a biological evaluation/assessment on the revised criteria by the time of the proposal to allow the Services to complete a biological opinion on the proposed selenium criteria before promulgating final criteria. EPA will provide the Services with updates regarding the status of EPA's revision of the criterion and any draft biological evaluation/assessment associated with the revision. EPA will promulgate final criteria as soon as possible, but no later than 18 months, after proposal. EPA will continue to consult, under section 7 of ESA, with the Services on revisions to water quality standards

contained in Basin Plans, submitted to EPA under CWA section 303, and affecting waters of California containing federally listed species and/or their habitats. EPA will annually submit to the Services a list of NPDES permits due for review to allow the Services to identify any potential for adverse effects on listed species and/or their habitats. EPA will coordinate with the Services on any permits that the Services identify as having potential for adverse effects on listed species and/or their habitat in accordance with procedures agreed to by the Agencies in the draft MOA published in the Federal Register at 64 FR 2755 (January 15, 1999) or any modifications to those procedures agreed to in a finalized MOA.

- C. EPA will utilize existing information to identify water bodies impaired by selenium in the State of California. Impaired is defined as water bodies for which fish or waterfowl consumption advisories exist or where water quality criteria necessary to protect federally listed species are not met. Pursuant to Section 303(d) of the CWA, EPA will work, in cooperation with the Services, and the State of California to promote and develop strategies to identify sources of selenium contamination to the impaired water bodies where federally listed species exist, and use existing authorities and resources to identify, promote, and implement measures to reduce selenium loading into their habitat. (See also "Other Actions B." below.)
- II. <u>EPA Modifications Addressing the Services' April 9, 1999 draft Reasonable and Prudent Alternatives for Mercury:</u>
- A. EPA will reserve (not promulgate) the proposed freshwater and saltwater acute and chronic aquatic life criteria for mercury in the final CTR.
- B. EPA will promulgate a human health criterion of 50 ng/l or 51 ng/l as designated within the final CTR for mercury only where no more restrictive federally-approved water quality criteria are now in place (e.g., the promulgation will not affect portions of San Francisco Bay).
- C. EPA will revise its recommended 304(a) human health criteria for mercury by January 2002. EPA will propose revised human health criteria for mercury in California by January 2003. These criteria should be sufficient to protect federally listed aquatic and aquatic-dependent wildlife species. EPA will work in close cooperation with the Services to evaluate the degree of protection afforded to federally listed species by the revised criteria. EPA will solicit public comment on the proposed criteria as part of its rulemaking process, and will take into account all available information, including the information contained in the Services' Opinion, to ensure that the revised criteria will adequately protect federally listed species. If the revised criteria are less stringent than those proposed by the Services in the Opinion, EPA will provide the Services with a biological evaluation/assessment on the revised criteria by the time of the proposal to allow the Services to complete a biological opinion on the proposed mercury criteria

before promulgating final criteria. EPA will provide the Services with updates regarding the status of EPA's revision of the criterion and any draft biological evaluation/assessment associated with the revision. EPA will promulgate final criteria as soon as possible, but no later than 18 months, after proposal. EPA will continue to consult, under section 7 of ESA, with the Services on revisions to water quality standards contained in Basin Plans, submitted to EPA under CWA section 303, and affecting waters of California containing federally listed species and/or their habitats. EPA will annually submit to the Services a list of NPDES permits due for review to allow the Services to identify any potential for adverse effects on listed species and/or their habitats. EPA will coordinate with the Services on any permits that the Services identify as having potential for adverse effects on listed species and/or their habitat in accordance with procedures agreed to by the Agencies in the draft MOA published in the Federal Register at 64 FR 2755 (January 15, 1999) or any modifications to those procedures agreed to in a finalized MOA.

- D. EPA will utilize existing information to identify water bodies impaired by mercury in the State of California. Impaired is defined as water bodies for which fish or waterfowl consumption advisories exist or where water quality criteria necessary to protect federally listed species are not met. Pursuant to Section 303(d) of the CWA, EPA will work, in cooperation with the Services, and the State of California to promote and develop strategies to identify sources of mercury contamination to the impaired water bodies where federally listed species exist, and use existing authorities and resources to identify, promote, and implement measures to reduce mercury loading into their habitat. (See also "Other Actions B." below.)
- E. EPA promulgated a new more sensitive analytical method for measuring mercury (see 40 CFR Part 136).
- III. <u>EPA Modifications Addressing the Services' April 9, 1999 draft Reasonable and Prudent Alternatives for Pentachlorophenol (PCP)</u>:
- A. By March of 2001, EPA will review, and if necessary, revise its recommended 304(a) chronic aquatic life criterion for PCP sufficient to protect federally listed species and/or their critical habitats. In reviewing this criterion, EPA will generate new information on chronic sub-lethal toxicity of commercial grade PCP, and the interaction of temperature and dissolved oxygen, to protect early life-stage salmonids. If EPA, revises its recommended 304(a) criterion, EPA will then propose the revised PCP criterion in California by March 2002. If the proposed criterion is less protective than proposed by the Services in their Opinion or if EPA determines that a proposed criterion is not necessary, EPA will provide the Services with a biological evaluation/assessment by March 2002 and will reinitiate consultation. EPA will keep the Services informed regarding the status of EPA's review of the criterion and any draft biological evaluation/assessment associated with the review. If EPA proposes a revised PCP

criterion by March 2002, EPA will promulgate a final criterion as soon as possible, but no later than 18 months, after proposal.

B. EPA will continue to use existing NPDES permit information to identify water bodies which contain permitted PCP discharges and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Reclamation Act (RCRA) sites that potentially contribute PCP to surface waters. EPA, in cooperation with the Services, will review these discharges and associated monitoring data and permit limits, to determine the potential for the discharge to impact federally listed species and/or critical habitats. If discharges are identified that have the potential to adversely affect federally listed species and/or critical habitat, EPA will work with the Services and the State of California to address the potential effects to the species. EPA will give priority to review data for fresh water bodies within the range of federally listed salmonids that currently lack a MUN designation as specified in the Regional Water Quality Control Boards' Basin Plans.

IV. <u>EPA Modifications Addressing the Services' April 9, 1999 draft Reasonable and Prudent Alternatives for Cad mium:</u>

EPA will develop a revision to its recommended 304 (a) chronic aquatic life criterion for cadmium by January 2001 to ensure the protection of federally listed species and/or critical habitats and will propose the revised criterion in California by January 2002. However, if EPA utilizes the revised metals criteria model referred to below (see V.C.), EPA will develop a revision to its recommended 304(a) criterion by January 2002 and will propose the revised criterion in California by January 2003. EPA will solicit public comment on the proposed criteria as part of its rulemaking process, and will take into account all available information, including the information contained in the Services' Opinion, to ensure that the revised criterion will adequately protect federally listed species. If the revised criterion is less stringent than that proposed by the Services in the Opinion, EPA will provide the Services with a biological evaluation/assessment on the revised criterion by the time of the proposal to allow the Services to complete a biological opinion on the proposed cadmium criterion before promulgating final criteria. EPA will provide the Services with updates regarding the status of EPA's revision of the criterion and any draft biological evaluation/assessment associated with the revision. EPA will promulgate final criteria as soon as possible, but no later than 18 months, after proposal. EPA will continue to consult, under section 7 of ESA, with the Services on revisions to water quality standards contained in Basin Plans, submitted to EPA under CWA section 303, and affecting waters of California containing federally listed species and/or their habitats. EPA will annually submit to the Services a list of NPDES permits due for review to allow the Services to identify any potential for adverse effects on listed species and/or their habitats. EPA will coordinate with the Services on any permits that the Services identify as having potential for adverse effects on listed species and/or their habitat in accordance with procedures agreed to by the Agencies in the draft MOA published in the Federal Register at 64 FR 2755 (January 15, 1999) or any modifications to those procedures agreed to in a finalized MOA.

V. <u>EPA Modifications to Address the Services' April 9, 1999 draft Reasonable and Prudent</u> Alternatives for Dissolved Metals:

- A. By December of 2000, EPA, in cooperation with the Services, will develop sediment criteria guidelines for cadmium, copper, lead, nickel and zinc, and by December of 2002, for chromium and silver. When the above guidance for cadmium, copper, lead, nickel and zinc is completed, Region 9, in cooperation with the Services, will draft implementation guidelines for the State of California to protect federally listed threatened and endangered species and critical habitat in California.
- B. EPA, in cooperation with the Services, will issue a clarification to the *Interim Guidance* on the Determination and Use of Water-Effect Ratios for Metals (EPA 1994) concerning the use of calcium-to-magnesium ratios in laboratory water, which can result in inaccurate and under-protective criteria values for federally listed species considered in the Services' opinion. EPA, in cooperation with the Services, will also issue a clarification to the *Interim Guidance* addressing the proper acclimation of test organisms prior to testing in applying water-effect ratios (WERs).
- C. By June of 2003, EPA, in cooperation with the Services, will develop a revised criteria calculation model based on best available science for deriving aquatic life criteria on the basis of hardness (calcium and magnesium), pH, alkalinity, and dissolved organic carbon (DOC) for metals. This will be done in conjunction with "Other Actions A." below.
- D. In certain instances, the State of California may develop site-specific translators, using EPA or equivalent state/tribe guidance, to translate dissolved metals criteria into total recoverable permit limits. A translator is the ratio of dissolved metal to total recoverable metal in the receiving water downstream, from a discharge. A site-specific translator is determined on site-specific effluent and ambient data.

Whenever a threatened or endangered species or critical habitat is present within the geographic range downstream from a discharge where a State developed translator will be used and the conditions listed below exist, EPA will work, in cooperation with the Services and the State of California, to use available ecological safeguards to ensure protection of federally listed species and/or critical habitat. Ecological safeguards include: (1) sediment guidelines; (2) biocriteria; (3) bioassessment; (4) effluent and ambient toxicity testing; or (5) residue-based criteria in shellfish.

Conditions for use of ecosystem safeguards:

- 1. A water body is listed as impaired on the CWA section 303(d) list due to elevated metal concentrations in sediment, fish, shellfish or wildlife; or,
- 2. A water body receives mine drainage; or,

3. Where particulate metals compose a 50% or greater component of the total metal measured in a downstream water body in which a permitted discharge (subject to translator method selection) is proposed and the dissolved fraction is equal to or within 75% of the water quality criteria.

Whenever a threatened or endangered species is present downstream from a discharge where a State developed translator will be used, EPA will work with the permitting authority to ensure that appropriate information, which may be needed to calculate the translator in accordance with the applicable guidance, will be obtained and used. Appropriate information includes:

- 1. Ambient and effluent acute and chronic toxicity data;
- 2. Bioassessment data; and/or
- 3. An analysis of the potential effects of the metals using sediment guidelines, biocriteria and residue-based criteria for shellfish to the extent such guidelines and criteria exist and are applicable to the receiving water body.

EPA, in cooperation with the Services, will review these discharges and associated monitoring data and permit limits, to determine the potential for the discharge to impact federally listed species and/or critical habitats. If discharges are identified that have the potential to adversely affect federally listed species and/or critical habitat, EPA will work with the Services and the State of California in accordance with procedures agreed to by the Agencies in the draft MOA published in the Federal Register at 64 FR 2755 (January 15, 1999) or any modifications to those procedures agreed to in a finalized MOA.

Other Actions

- A. EPA will initiate a process to develop a national methodology to derive site-specific criteria to protect federally listed threatened and endangered species, including wildlife, in accordance with the draft MOA between EPA and the Services concerning section 7 consultations.
- B. EPA will use existing information to identify water bodies impaired by mercury and selenium in the State of California. "Impaired" is defined as water bodies for which fish or waterfowl consumption advisories exist or where water quality criteria necessary to protect the above species are not met. Pursuant to Section 303(d) of the CWA, EPA will work with the State of California to promote and develop strategies to identify sources of selenium and mercury contamination to the impaired water bodies where federally listed species exist, and use existing authorities and resources to identify, promote, and implement measures to reduce selenium and/or mercury loading into their habitat (e.g., San Joaquin River, Salton Sea, Cache Creek, Lake Nacimiento, Sacramento San Joaquin Delta etc.). EPA will work closely with the Services on individual TMDLs to avoid delays associated with approvals of these actions. (See also Selenium C. and

Mercury D., above.)

The Services in our finalization of this biological opinion have formalized and refined the preceding agreements into non-discretionary terms and conditions presented in the "Incidental Take Statement" section of this document. The Services where necessary have included additional language in some areas of these agreements to ensure that these agreements/measures are enforceable.

<u>Implementation of the CTR</u>

In the CTR, EPA proposes numeric water quality criteria which, when combined with the designated uses for water bodies selected by the State, create water quality standards. These standards are applied to dischargers through implementation procedures adopted by the State. Subsections included in the implementation schedule of the CTR include the development of Total Maximum Daily Loads (TMDL), Interim Permit Limits, Mixing Zones, and Variances. The promulgation of the CTR is a Federal action and therefore all aspects of its implementation are subject to consultation requirements pursuant to section 7 of the Act. The State's adoption and implementation of the CTR must be approved by EPA and are therefore also subject to section 7 consultation requirements as part of EPA approval.

Wet Weather Flows

A wet weather point source means any discernible confined and discrete conveyance from which pollutants are, or may be, discharged as the result of a wet weather event. For the purposes of the CTR these discharges include only: discharges of storm water from a municipal separate storm sewer as defined at 40 CFR § 122.26(b)(8); storm water discharge associated with industrial activity as defined at 40 CFR § 122.26(b)(14); discharges of storm water and sanitary wastewater (domestic, commercial, and industrial) from a combined sewer overflow; or any storm water discharge for which a permit is required under § 402(p) of the CWA. NPDES permits for wet weather point source discharges must include limits necessary to implement applicable water quality standards, through application of water quality-based effluent limits (WQBELs). When the CTR rulemaking process is complete, these criteria will be used to determine water quality standards in California and will therefore be the basis for WQBELs in NPDES permits for wet weather point sources. Where it is infeasible to express WQBELs as numeric limits for wet weather discharges, best management practices (BMPs) may be used as WQBELs. It is anticipated that WQBELs, including those necessary to meet the criteria set forth in the CTR, will be expressed as BMPs in wet weather discharge NPDES permits when the permitting authority determines that it is infeasible to express WQBEL as numeric limits.

Schedules of Compliance

The CTR provides that compliance schedules may take up to five years to meet new or more stringent effluent limitations, and in cases where EPA has recently approved site-specific criteria,

the criteria contained within the CTR may not be reached for up to 10 years. All site-specific criteria must be approved by the EPA and are therefore subject to consultation pursuant to section 7 of the Act.

DESCRIPTION OF THE ACTION AREA

The CTR covers surface waters in California, which are waters of the United States, and which have been designated as inland surface waters or enclosed bays and estuaries. These include all watersheds with their rivers, streams, channels, lakes, ponds, enclosed bays and estuaries in California. Ocean water is not covered by the CTR, because the State of California already has a valid statewide plan to control ocean water quality. This proposed rule does not change or supersede any criteria previously promulgated for the State of California in the NTR, as amended. This proposed rule is not intended to apply to waters within Indian Country (*sic*).

The CTR is a statewide rulemaking process promulgating water quality criteria for all parts of California, with limited exceptions, where water quality criteria have been adopted for specific water bodies. For instance, the selenium criteria for the San Francisco Bay have already been promulgated under the NTR. For a complete list of such exceptions see footnotes "o" through "t" to the table listing all priority toxic pollutants in the CTR itself.

Water quality criteria previously promulgated within the NTR (but not previously consulted on) are considered in this opinion for adequacy of protection of listed species. EPA has not provided the Services with a list of waters for which the CTR does not apply and therefore, the Services have considered all waters within the State equally.

SPECIES DESCRIPTIONS

Aleutian Canada Goose (Branta canadensis leucoparia)

Species Description and Life History: The Aleutian Canada goose was listed as threatened on December 12, 1990 (55 **FR** 51112). This subspecies was originally classified as endangered on March 11, 1967.

The Aleutian Canada goose can be distinguished from most other subspecies of Canada geese by their small size (only cackling Canada geese are smaller) and a ring of white feathers at the base of the black neck in birds older than 8 months. Lakes, reservoirs, ponds, large marshes, and flooded fields are used for roosting and loafing (Grinnell and Miller 1944, USDI-FWS 1982a).

Foraging Ecology: Aleutian Canada geese forage in harvested corn fields, newly planted or grazed pastures, or other agricultural fields (e.g., rice stubble and green barley).

Historic and Current Distribution: Historically, Aleutian Canada geese wintered from British